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APPLICATION NUMBER	FILING DATE	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
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08/797.553 01/24/97 HELLBAUM

R	LAR-15493-1
EXAMINER	

MMC1/0530

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ART UNIT	PAPER NUMBER
BUDD-M	

2834
DATE MAILED:

05/30/00

This is a communication from the examiner in charge of your application.
COMMISSIONER OF PATENTS AND TRADEMARKS

OFFICE ACTION SUMMARY

☒ Responsive to communication(s) filed on 4-26-00

☒ This action is FINAL.

☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 D.C. 11; 453 O.G. 213.

A shortened statutory period for response to this action is set to expire 3 month(s), or thirty days, whichever is longer, from the mailing date of this communication. Failure to respond within the period for response will cause the application to become abandoned. (35 U.S.C. § 133). Extensions of time may be obtained under the provisions of 37 CFR 1.136(a).

Disposition of Claims

- ☒ Claim(s) 17-24 is/are pending in the application.
Of the above, claim(s) _____ is/are withdrawn from consideration.
☐ Claim(s) _____ is/are allowed.
☒ Claim(s) 17-24 is/are rejected.
☐ Claim(s) _____ is/are objected to.
☐ Claim(s) _____ are subject to restriction or election requirement.

Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
☐ The proposed drawing correction, filed on _____ is ☐ approved ☐ disapproved.
☐ The specification is objected to by the Examiner.
☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
☐ All ☐ Some* ☐ None of the CERTIFIED copies of the priority documents have been
☐ received.
☐ received in Application No. (Series Code/Serial Number) _____
☐ received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

*Certified copies not received: _____

- ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e).

Attachment(s)

- ☐ Notice of Reference Cited, PTO-892
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). _____
☐ Interview Summary, PTO-413
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
☐ Notice of Informal Patent Application, PTO-152

--SEE OFFICE ACTION ON THE FOLLOWING PAGES--

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Claims 17-24 are rejected under 35 USC 103 as unpatentable over Corwin in view of Haertling or vice versa. Corwin teaches the electro active device except the prestress layer is bonded to the convex side of the piezoelectric layer. Huertling teaches that the prestress layer can be attached to the concave side of the piezoelectric element if desired. It is only necessary to assure that the piezoelement does not go into tension as this could cause breaking of the device. Thus, it would have been obvious to one of ordinary skill in the art that the prestress layer could be attached to either the concave or convex side of the piezoelectric element. Conversely, Huertling teaches the claimed electroactive device except the prestress layer is integral with the piezoelectric element. As noted in the first Office action, making parts integral or separable has long been held to be within the skill expected of the routineer. Further, Corwin explicitly teaches providing a prestress layer as a separate element. The examiner agrees that Huertling teaches there are advantages to using the monolithic construction. However, Hartling, by his every discussion, teaches that a separate layer device was known and consistered before the monolithic structure was preferred. Thus applicants claimed structure was known and contemplated by Hartling, or at least the combination of Hurtling as two separate layers (ala Corwin) was known or contemplated. The two layer structure, while not preferred by Hartling, is taught as suitable for small load applications, and would be less costly to produce. Thus, it would have been obvious to one of ordinary skill in the art that Haertling could be provided as two separate, bonded, layers.

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THIS ACTION IS MADE FINAL. Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Budd/dc
May 24, 2000


MARK J. BUDD
PRIMARY EXAMINER
ART UNIT 212